



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/808,130	03/15/2001	Hiroyuki Horiuchi	HIG05 002	4640

7590 06/13/2003

Duane Morris LLP  
1667 K Street NW  
Suite 700  
Washington, DC 20006

EXAMINER

DICUS, TAMRA

ART UNIT

PAPER NUMBER

1774

DATE MAILED: 06/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/808,130

Applicant(s)

HORIUCHI, HIROYUKI

Examiner

Tamra L. Dicus

Art Unit

1774

-- Th MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 April 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) \_\_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

**DETAILED ACTION**

***Response to Amendment***

The 112 rejections are withdrawn due to further consideration.

1. Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by USPN 5,631,076 to Hakomori et al.
2. Claims 1 and 3 are rejected under 35 U.S.C. 102(e) as being anticipated by USPN 6,261,670 to Hakomori et al.
3. Regarding the new limitation in amended instant claim 1, the lower limit of "0.5 g/cm<sup>3</sup>" is still taught by Hakomori '076 and '670, as both teach apparent densities within the claimed range. Prior rejections, mailed Nov. 20, 2002, continues to read on claims 1 and 3 for reasons previously applied.
4. The 102(b) and 102(e) rejections are maintained for reasons of record stated previously.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 2-3 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,631,076 to Hakomori, as applied in claim 1 above, in view of USPN 5,712,026 to Amagai et al.
7. Prior rejections, mailed Nov. 20, 2002, continues to read the instant invention as claimed.

8. Claims 4-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 5,631,076 to Hakomori et al., as applied to claim 1 above, in view of USPN 5,712,026 to Amagai et al. and in further view of USPN 5,593,940 to Umise et al.
9. Prior rejections, mailed Nov. 20, 2002, continues to read the instant invention as claimed.

***Response to Arguments***

Applicant alleges Hakomori '076 does not teach the thermal conductivity requirement. However, the Applicant appears to disregard this very teaching. Hakomori '076 teaches the thermal conductivity falling within the claimed range as in instant amended claim 1, see Hakomori's abstract. The Applicant has not provided a persuasive argument.

Applicant contends Hakomori '670 does not teach the thermal conductivity requirement. However, as previously explained, the same materials are present and therefore the thermal conductivity requirement is indeed inherent. Especially since Applicant has not shown any evidence to the contrary. A proper *prima facie* case has been established, and therefore the burden shifts to the Applicant to submit additional objective evidence of nonobviousness, such as comparative test data showing that the claimed invention possesses improved properties not expected by the prior art. Until the Applicant can show and prove any results that would not obvious, the rejection will stand.

Applicant further asserts that Hakomori '076 does not teach the centerline average roughness, however, the Examiner never used Hakomori '076 to teach this property. The Examiner used Amagai which teaches the centerline average roughness property values within the claimed range of Applicant, thereby meeting the claim. Applicant further argues that Amagai teaches centerline average roughness property values for the support and not the ink receiving

Art Unit: 1774

layer. This is simply not true. Amagai teaches the centerline average roughness property values for ink receiving layers by stating so at col. 7, lines 34-35.

Applicants contentions further focus on the apparent density limitation, but Applicant appears to disregard Hakomori's teaching the very same density range found in Hakomori's abstract. It is specifically stated that the apparent density is in the range of 0.4-0.9 g/cm<sup>3</sup> at col. 11, line 38 also.

Applicant asserts that grain and pore diameters are not the same. The Examiner disagrees. The same materials are taught, so the corresponding diameters are equivalents.

Applicant alleges that Umise does not obviate the deficiencies of Hakomori '076 because Umise teaches a thermal transfer sheet for use in transferring ink while applicant teaches a recording material with an ink-receiving layer. The Applicant has not made a persuasive argument. The sheet of Umise is a functional equivalent to that of Applicant, teaching an image-receiving layer (ink-receiving) at col. 2, lines 64-65, col. 11, lines 9-15, in the Experimental Example, especially col. 15, lines 49-60. Further, one skilled in the art would be motivated to combine the sheet with Hakomori's sheet because they are indeed in the same technical field e.g. print recordable sheets. Moreover, transfer sheets are functional equivalents of recordable sheets. Applicant believes the properties of the sheet are incorrectly rejected. The Examiner does not agree. Applicant has not provided persuasive arguments. Umise and Amagai both teach all the properties of the sheet as recited in the record.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 1774

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamra L. Dicus whose telephone number is (703) 305-3809. The examiner can normally be reached on Monday-Friday, 7:00-4:30 p.m., alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached on (703) 308-0449. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-8329 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Tamra L. Dicus  
Examiner  
Art Unit 1774

June 11, 2003

CYNTHIA H. KELLY  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700

